GT 7 T

WO 2005/093297

CLAIMS

PCT/JP2005/003817

1. A gasket for preventing high-temperature fluid of an internal combustion engine from leaking, the gasket being located between an adjacent pair of components of the engine, the gasket being characterized by:

a gasket plate made of an electrically insulating material, the gasket plate having a hole; and

an annular sealing member made of a material having a higher heat resistance than the gasket plate, wherein the annular sealing member covers part of the gasket plate that defines the hole.

- 2. The gasket according to claim 1, characterized in that 15 the fluid is combustion gas generated as the engine operates.
 - 3. The gasket according to claim 1 or 2, characterized in that the pair of the components are a cylinder block and a cylinder head, the cylinder block having a cylinder bore, and wherein the hole is formed to correspond to the cylinder bore.
 - 4. The gasket according to any one of claims 1 to 3, characterized in that the electrically insulating material is a synthetic resin.

25

35

20

5

10

- 5. The gasket according to any one of claims 1 to 4, characterized in that the annular sealing member includes:
- a pair of holding portions that hold the gasket plate in between; and
- a coupler portion that couples the holding portions to each other in the hole.
 - 6. The gasket according to claim 5, characterized in that the annular sealing member is formed by bending a plate member.

WO 2005/093297 PCT/JP2005/003817

7. The gasket according to claim 5 or 6, characterized by a deformation restricting portion that restricts deformation of the annular sealing member along the thickness of the gasket plate.

5

10

- 8. The gasket according to claim 7, characterized in that the deformation restricting portion extends along the thickness of the gasket plate between the holding portions.
- 9. The gasket according to claim 8, characterized in that the deformation restricting portion has a length that is substantially equal to the thickness of the gasket plate.
- 10. The gasket according to any one of claims 7 to 9, characterized in that the deformation restricting portion is formed by bending part of one of the holding portions toward the other holding portion.
- 20 11. The gasket according to any one of claims 1 to 10, characterized in that the internal combustion engine has a cylinder, and the gasket plate is formed of a single plate member, the gasket further comprising:
- a sensor for detecting a state in the cylinder, the
 25 gasket plate having a guide hole, wherein a lead extending
 from the sensor passes through the guide hole.
- 12. The gasket according to any one of claims 1 to 11, characterized in that the high heat resistance material is a stainless steel.

WO 2005/093297 PCT/JP2005/003817

AMENDED CLAIMS

[received by the International Bureau on 06 July 2005 (06.07.05) original claims 1, 6, 8 and 10 amended; original claims 5 and 7 cancelled; and remaining claims unchanged (2 pages)]

1. A gasket for preventing high-temperature fluid of an internal combustion engine from leaking, the gasket being located between an adjacent pair of components of the engine, wherein the gasket includes:

a gasket plate made of an electrically insulating material, the gasket plate having a hole; and

an annular sealing member made of a material having a

10 higher heat resistance than the gasket plate, wherein the
annular sealing member covers part of the gasket plate that
defines the hole,

wherein the annular sealing member includes:

a pair of holding portions that hold the gasket plate in 15 between; and

a coupler portion that couples the holding portions to each other in the hole,

the gasket being characterized by:

a deformation restricting portion that restricts

deformation of the annular sealing member along the thickness of the gasket plate.

- 2. The gasket according to claim 1, characterized in that the fluid is combustion gas generated as the engine operates.
- 3. The gasket according to claim 1 or 2, characterized in that the pair of the components are a cylinder block and a cylinder head, the cylinder block having a cylinder bore, and wherein the hole is formed to correspond to the cylinder bore.
- 4. The gasket according to any one of claims 1 to 3, characterized in that the electrically insulating material is a synthetic resin.
- 35 5. (cancelled)

5

25

30

WO 2005/093297 PCT/JP2005/003817

6. The gasket according to any one of claims 1 to 4, characterized in that the annular sealing member is formed by bending a plate member.

5

10

20

25

7. (cancelled)

- 8. The gasket according to any one of claims 1 to 6, characterized in that the deformation restricting portion extends along the thickness of the gasket plate between the holding portions.
- 9. The gasket according to claim 8, characterized in that the deformation restricting portion has a length that is substantially equal to the thickness of the gasket plate.
 - 10. The gasket according to any one of claims 1 to 9, characterized in that the deformation restricting portion is formed by bending part of one of the holding portions toward the other holding portion.
 - 11. The gasket according to any one of claims 1 to 10, characterized in that the internal combustion engine has a cylinder, and the gasket plate is formed of a single plate member, the gasket further comprising:
 - a sensor for detecting a state in the cylinder, the gasket plate having a guide hole, wherein a lead extending from the sensor passes through the guide hole.
- 12. The gasket according to any one of claims 1 to 11, characterized in that the high heat resistance material is a stainless steel.